

Trouble Shooting Guide for Residential Smoke Alarms

False alarms can result from a wide variety of causes. Some of the most common causes are listed below. If a smoke alarm has issued an apparent false alarm, but appears to be operating normally, check the recommended solution for each alarm cause.

Improper Siting and Location:

False alarms can occur in areas with temperature extremes, excessive dust, dirt or humidity; excessive air flow rates; or the presence of combustion particles, vapours, gases, or fumes in air streams surrounding the alarm.

Could there be visible or invisible particles in the air flow: chemicals, cleaning materials, fuels etc? (ie. Cooking fumes, toast fumes, paint).

Does cooking, smoking, or an activity that uses a combustion process (like heating) occur near the alarm or where an air current that flows near the alarm can transport combustion particles to the alarm location?

Is there rapid air movement around the false alarm?

Is the alarm close to windows, a door or an air vent?

A suddenly opened or closed window or door can momentarily cause high air velocities.

Improper Installation:

False alarms can occur where the smoke alarm wiring is not protected from interference from fluorescent lights, induced currents and noise in adjacent wiring systems, radio frequency transmissions and other types of electromagnetic effects.

Are smoke alarms installed too close to fluorescent lighting or other apparatus capable of emitting electromagnetic effects?

Inadequate Maintenance:

Inadequate maintenance will result in the accumulation of dust and dirt on the alarm's sensing chamber over a period of time resulting in increasing false alarms.

Is the environment around the alarm dusty or dirty?

Seasonal Effects:

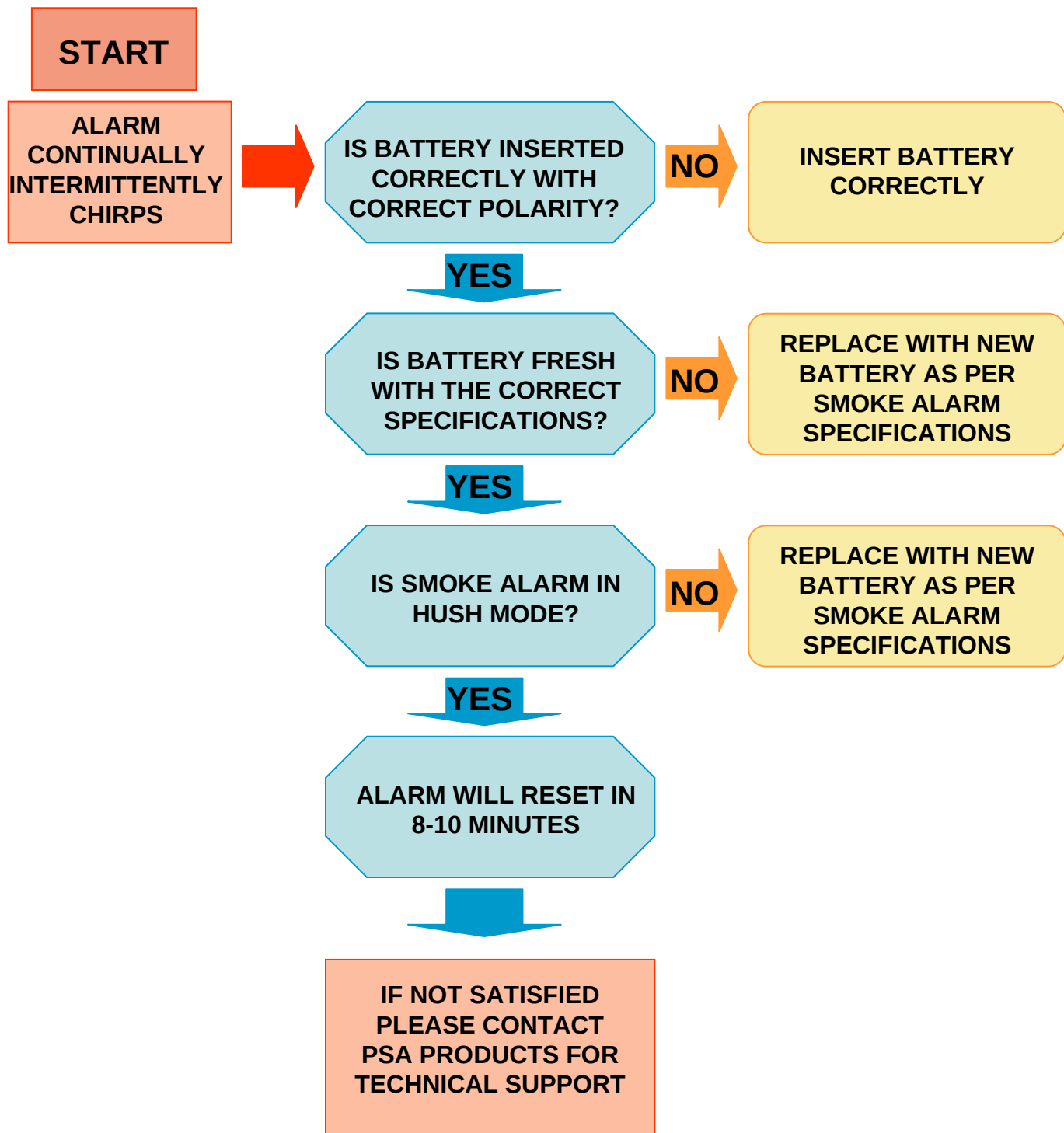
Seasonal effects such as alarms that occur during the re-activating of the building heating system after an extended summer shutdown and the dust accumulated on the heating coils is burned off can result in false alarms.

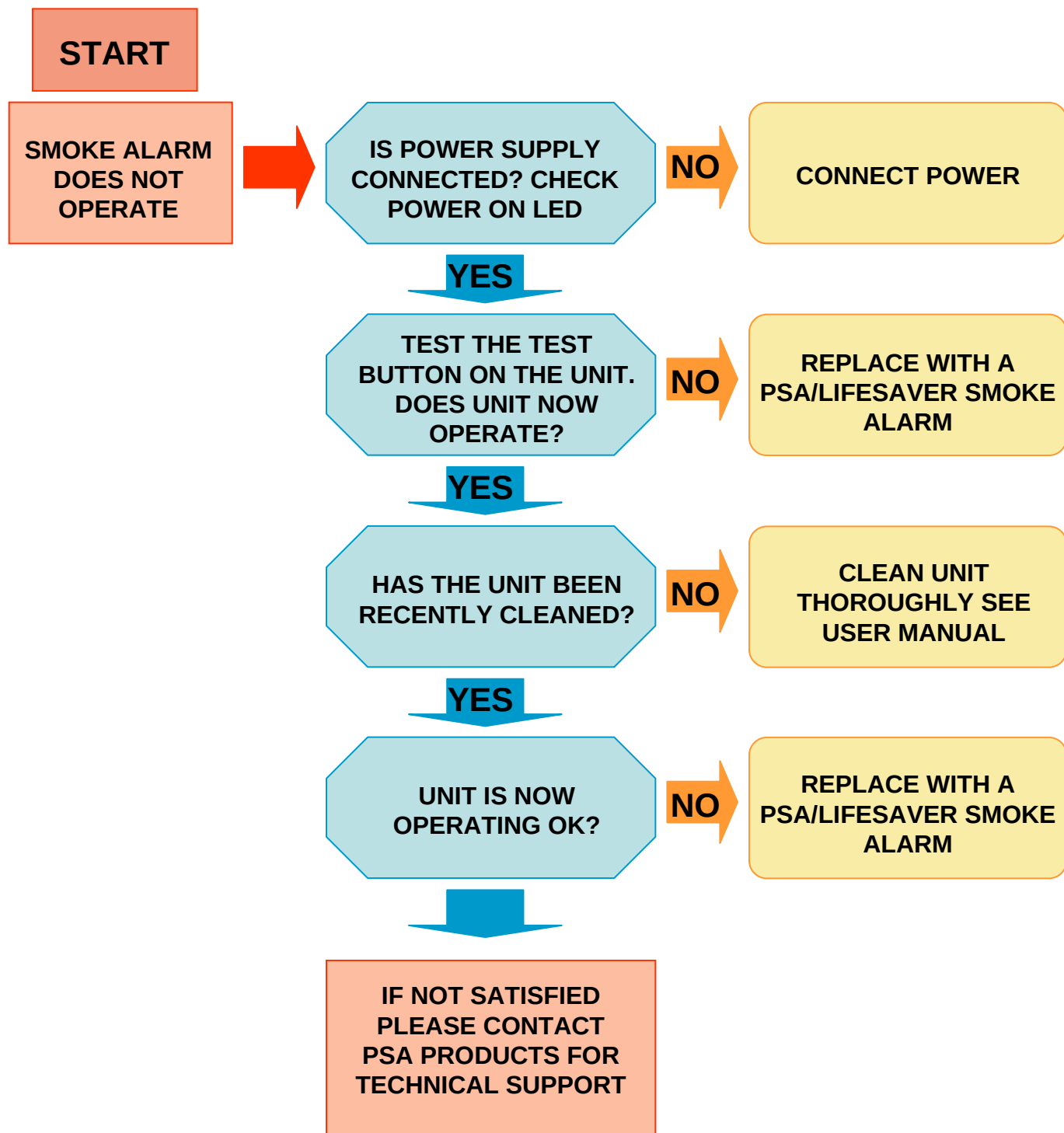
Is the environment excessively humid? Do rapid changes in humidity or concentration of water droplets occur? (ie. Steam from laundry, bathroom or kitchen).

Insect Infestation:

From bugs small enough to enter the alarm's sensing chamber.

Are there insects near or around the alarm? When tiny insects get into an alarm's sensing chamber they can cause an alarm response.





START

**ALARM
CONTINUALLY
NUISANCE
ALARMING**

**IS INSTALLATION NEAR
COOKING FUMES, PAINT
FUMES OR STEAM?**

YES

**RELOCATE ALARM OR
REPLACE WITH A
PSA/LIFESAVER
PHOTOELECTRIC SMOKE
ALARM**

NO

**IS INSTALLATION IN
AIR STREAMS THAT
MAY CAUSE COOKING
FUMES, PAINT FUMES
ETC?**

YES

**RELOCATE ALARM OR
REPLACE WITH A
PSA/LIFESAVER
PHOTOELECTRIC SMOKE
ALARM**

NO

**IS THE ALARM
ALARMING WHEN
COOKING TAKES
PLACE?**

YES

**RELOCATE ALARM OR
REPLACE WITH A
PSA/LIFESAVER
PHOTOELECTRIC SMOKE
ALARM**

NO

**HAS ALARM BEEN
EXPOSED TO DUST,
SANDING OR BEEN
INSTALLED FOR SOME
TIME WITHOUT
PROBLEMS?**

YES

**SMOKE ALARM
REQUIRES THOROUGH
CLEANING**

NO

**ARE THERE INSECTS
AROUND THE ALARM?
I.E. BUGS, SPIDERS
ETC.**

YES

**FUMIGATE AREA AND
THOROUGHLY CLEAN
ALARM**

NO

**REPLACE WITH A
PSA/LIFESAVER SMOKE
ALARM**